still some inadvertencies on the part of the author, or "improvements" introduced by the printer; such, for example, as: controled (p. 208), Quick, P. H., for "R. H." (p. 224), pole tax (p. 262), Strassberg (p. 313), National Teacher's Association (p. 332), Levy for "Levi" (p. 370), and the studies (for "study") of the historical subjects (p. 393).

The criticisms above may, however, seem pedantic and captious, in view of the real merit of the book. Mr. Parker's text is, in general, the type of "thing we long have sought, and mourned because we found it not." It will be of real service in training teachers, especially for elementary grades. The brief statement of the main points at the beginning of each chapter will greatly assist the student in his reading and will prove an excellent means of reviewing and making the connections between various parts of the book. The illustrations have been well chosen and will often heighten the reader's mental picture. The author has been fortunate in being able to draw upon the invaluable Plimpton collection and other sources for his visual material. From the *Tower of Knowledge* of Gregorius Reisch, which first appeared in 1504, to the most modern examples of constructive work in the Dewey experimental school, the illustrations are pertinent, clear, and attractive.

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General Science. By BERTHA M. CLARK. New York: American Book Co., 1912. Pp. 352. Illustrated. Laboratory manual for the same. Pp. 96.

General Science, as the name would signify, is a book containing material from a number of sciences. The chief topics included are mechanics, heat, light, electricity, hygiene, applied chemistry, and physiography. As may be seen from this list, there is no attempt to include any botany or zoölogy as such, though yeasts and molds are dealt with in connection with hygiene and chemistry.

Since the author has dispensed with the traditional divisions of material it is interesting to note her standard of selection. In the preface we find a statement of this: "No claim is made to originality in subject-matter. The actual facts, theories, and principles used are such as have been presented in previous textbooks of science but the manner and sequence of presentation are new, and, so far as I know, untried elsewhere. These are such as in my experience have aroused the greatest interest and initiative, and such as have at the same time given the maximum benefit from the informational standpoint."

As usefulness and interest determine the subject-matter, so do interest and simplicity determine the method of presentation. The book is certainly interesting, and simple enough to be used by a seventh-grade pupil with appreciation. For an example of its style and method I quote the following discussion of the expansion of solids which follows a similar discussion on liquids: "Not only liquids are affected by heat and cold but solids also are subject to similar

changes. A metal ball which when cool will just slip through a metal ring will, when heated, be too large to slip through the ring." (Here a pictorial illustration is provided.) "Telegraph and telephone wires, which in winter are stretched taut from pole to pole, sag in hot weather and are much too long. In summer they are exposed to the fierce rays of the sun, become strongly heated, and expand sufficiently to sag. If the wires were stretched taut in summer there would not be sufficient leeway for the contraction, and in winter they would snap." Accompanying the text is a laboratory manual. This provides for simple exercises to illustrate the facts given in the text. Here also no difficulties are met with in the way of mathematical problems or complicated apparatus. Each experiment is to show clearly some simple principle learned in the text. For example, to accompany the above-mentioned study of the expansion of metals an exercise is given to the pupils. In brief it is this. A bar of iron is measured, heated a given number of degrees, and measured at the new temperature. From the data so obtained the expansion of one centimeter of iron when heated one degree is determined. "This is the coefficient of expansion of iron." The experiment is not so conducted as to provide any considerable degree of accuracy, but it will at least impress the fact that the iron did expand and, if properly conducted, should make the pupils keen in observing the means of adjustment to such action in bridges, rails, etc.

This book does not provide a course in science in the sense of affording a training in scientific thinking or developing a scientific attitude toward the phenomena studied. What it does accomplish is to give the child a great deal of information about the things with which he has most to do and to explain those phenomena which most concern him. It has the same relationship to physics, hygiene, and chemistry that nature-study has to botany and zoölogy. As a text to follow one in nature-study in the grades *General Science* would be excellent. Like the texts in Nature-Study it has been free to consider the interests of the pupil aside from any traditional course of study requirements or even of justification as a mental discipline.

At the time of the seventh and eighth grades most children, particularly boys, have a great interest in knowing how and why many things are done. It is the age of planning and making things, the age when a boy wants to do something practical. At this time the demand is great for popular science literature and for books such as *How to Make a Sail-Boat.* Since children will apply a large part of their interest in this way it seems as though this energy might be much better used if intelligently encouraged in school by such a text as *General Science.*

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The Country School. By HOMER H. SEERLEY. New York: Scribner, 1913.

The main title of this book is not inclusive enough. The explanatory subtitle, "A Study of Its Foundations, Relations, Developments, Activities,